CHAPTER 7: REGIONAL GENERAL AVIATION FORECASTS

In Southern California, flying must compete with other leisure activities, such as sailing, surfing, skiing, off road racing and computer/video games. However, the region is blessed with excellent flying weather most days.

The Federal Aviation Administration projects the general aviation pilot population (excluding all Air Transport Pilots) to increase annually at a 1.2% rate until 2014, the end of their forecast period. The assumptions used for the FAA forecast include a strong economic recovery beginning in mid to late 2003 and the peaceful resolution to the Iraq situation.

SCAG is required to forecast a minimum of 20 years, with the knowledge that the longer forecast has greater inherent risks in accuracy. Because of the current economic climate, SCAG estimates pilot growth will not recover until 2004-2005. Growth rates for the major general aviation pilot categories are:

Student Pilots	Slight decline in 2003 and 0.52% average annual growth to 2030.
Private Pilots	Slight decline in 2003 and 0.80% average annual growth to 2030
Commercial Pilots	Slight decline in 2003 and 0.18% average annual growth to 2030
Air Transport Pilots	Very slight decline in 2003 and 2.32% average annual growth to 2030.

Student pilots are considered transitory, in that once students successfully complete flight training (usually after 50-60 hours of flight time), they are no longer considered student pilots, but private pilots. The high student pilot forecast is the result of several initiatives started by the FAA and aviation industry groups designed to increase interest in flying. The initiatives are necessary with the flying retirement of the first of the baby-boomer generation within the forecast period. Air Transport Pilots flying for airlines are required to quit flying at age 60, meaning the first year baby boomers will begin retiring from piloting commercial airliners in 2006. These initiatives include the addition of a "sport" pilot category. The FAA expects the sport certificate to reduce the expense of flight training thereby attracting more student pilots.

Table 7-1: Student Pilot Forecast

	2002	2005	2010	2015	2020	2025	2030
Imperial	9	9	9	9	10	10	10
Los Angeles	1,651	1,637	1,681	1,725	1,770	1,817	1,865
Orange	752	746	765	786	806	828	849
Riverside	518	514	527	541	555	570	585
San Bernardino	486	482	495	508	521	535	549
Ventura	252	250	257	263	270	277	285
Total	3,668	3,638	3,734	3,832	3,933	4,037	4,143

Private pilots represent the majority of pilots in the region and across the country. The private pilot can fly recreationally, for personal transportation and for the experience and training necessary for eventual commercial or air transport certificates.

Table 7-2: Private Pilot Forecast

	2002	2005	2010	2015	2020	2025	2030
Imperial	92	93	97	101	105	109	113
Los Angeles	5,649	5,730	5,953	6,184	6,424	6,673	6,932
Orange	2,538	2,575	2,674	2,778	2,886	2,998	3,114
Riverside	1,444	1,465	1,522	1,581	1,642	1,706	1,772
San Bernardino	1,397	1,417	1,472	1,529	1,589	1,650	1,714
Ventura	1,102	1,118	1,161	1,206	1,253	1,302	1,352
TOTAL	**12,222**	**12,398**	**12,879**	**13,379**	**13,898**	**14,437**	**14,997**

After significant training and several hundred hours of experience, private pilots can be tested and certified as Commercial Pilots, allowing them to fly for hire under various federal aviation regulations.

Table 7-3: Commercial Pilot Forecast

	2002	2005	2010	2015	2020	2025	2030
Imperial	66	66	67	67	68	69	69
Los Angeles	2,698	2,705	2,730	2,755	2,781	2,806	2,832
Orange	1,264	1,267	1,279	1,291	1,303	1,315	1,327
Riverside	687	689	695	702	708	715	721
San Bernardino	652	654	660	666	672	678	684
Ventura	480	481	486	490	495	499	504
TOTAL	**5,847**	**5,863**	**5,917**	**5,971**	**6,026**	**6,082**	**6,138**

Commercial Pilots, after over 1,600 hours of specific experience, can be tested and certified as an Air Transport Pilot. Air Transport Pilots are certified to fly air passengers and air cargo with the air carriers. Pilots in this category are expected to increase at a 2.32% annual rate after 2003. While this is slightly lower than the national forecast of 3%, it represents the highest percentage growth in any category. Southern California remains one of the busiest aviation markets in the country. With an international hub (LAX) that is the primary gateway to Asia, and significant high frequency short-haul service between the Los Angeles area, San Francisco, Sacramento and Las Vegas, the demand for air transport pilots should remain strong. In addition, corporate aviation flight departments are increasingly requiring air transport pilot certification instead of commercial certification as a condition for employment.

Table 7-4: Air Transport Pilot Forecast

	2002	2005	2010	2015	2020	2025	2030
Imperial	12	13	14	16	18	20	22
Los Angeles	1,892	1,979	2,219	2,488	2,790	3,129	3,509
Orange	1,429	1,495	1,676	1,880	2,108	2,363	2,650
Riverside	608	636	713	800	897	1006	1128
San Bernardino	407	426	477	535	600	673	755
Ventura	640	669	751	842	944	1059	1187
TOTAL	**4,988**	**5,217**	**5,850**	**6,560**	**7,357**	**8,250**	**9,251**

General Aviation Operations Forecast

Summary

The SCAG regional aviation system is the largest and possibly the busiest in the United States. In reviewing survey and forecast data, SCAG reached the following conclusions:

- At SCAG commercial airports (all of which are towered), as commercial operations have increased, general aviation activity has decreased.
- At larger regional urban General Aviation Airports such as Van Nuys and Santa Monica that can support small corporate jets, corporate activity, as a percentage of total activity, grows, unless the airport imposes restrictions limiting jet aircraft (e.g. Torrance/Zamperini Airport not selling jet fuel).
- There is a shortage of general aviation hangar space at all urban and many suburban area airports.
- Because of the complex operating airspace environment, smaller (ARC A1 and B1) airports in urban areas will have little to no growth in activity, but should remain at 100% capacity in terms of hangar occupancy.
- As large urban general aviation airports approach capacity (and are unable to expand), based aircraft and activity will initially increase at larger airports on the edge of the urban/suburban boundaries (area between El Monte and San Bernardino) before spreading to more rural airports.
- New "light sport" aircraft certification by the FAA (formerly called "ultra-light" aircraft which were previously not certified) could increase student activity and recreational activity at smaller airports in remote locations.

Table 7-5: General Aviation Forecast

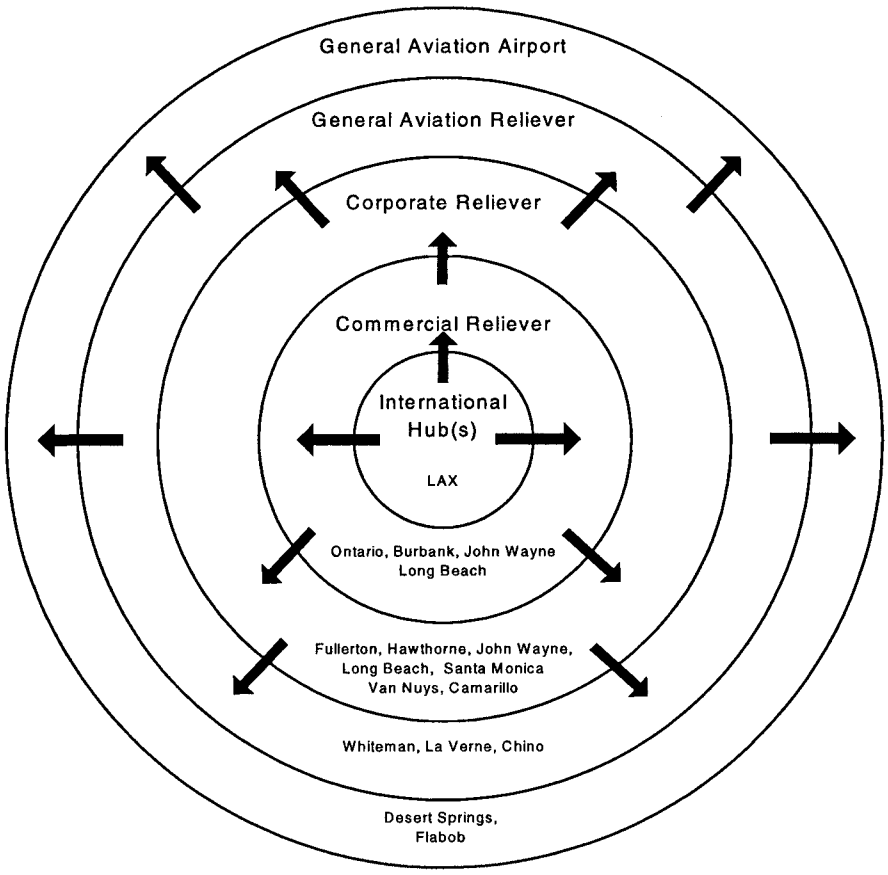
	2005	2010	2015	2020	2025	2030
Imperial	105,250	110,278	115,556	121,875	126,903	131,931
Los Angeles	2,130,999	2,282,557	2,432,018	2,3801213	2,467,284	2,780,316
Orange	340,088	356,189	372,255	388,306	404,456	420,965
Riverside	600,526	624,249	661,967	699,169	737,656	777,326
San Bernardino	766,859	811,508	858,893	906,961	956,308	1,008,278
Ventura	371,500	377,392	383,129	396,827	398,214	402,937
TOTAL	4,315,222	4,562,173	4,823,818	5,095,362	5,305,984	5,521,753

General Aviation

General aviation is an integral part of the regional aviation system as well as the regional economy. Smaller airports act as relievers to commercial airports, allowing commercial aircraft, business and personal aircraft to operate in a safer environment. Also, for areas that have a significant economic base, corporate aviation activity works in a symbiotic relation to the local economy.

However, general aviation does not exist separately from commercial aviation. Changes in the growth, or development, of the primary international and commercial reliever airports in a region have "ripple" effects on other regional airports. . As a high-demand airport approaches its physical capacity, it (or its tenants) will force out less profitable services in order to maximize revenue and/or increase efficiency. These less efficient services will be served at a lesser rate at the primary airport, by alternate regional airports, or will leave the region. The effect is displayed on page 4-4, with some examples of regional airports.

Figure 7-1: The Ripple Effect



The ripple effect of SCAG commercial airports approaching their physical or legal constraints on smaller airports is already occurring. This can be seen in the decline of general aviation activity at regional commercial airports in Figures 7-2 and 7-3 below.

Figure 7-2: General Aviation Operations at SCAG Commercial Airports

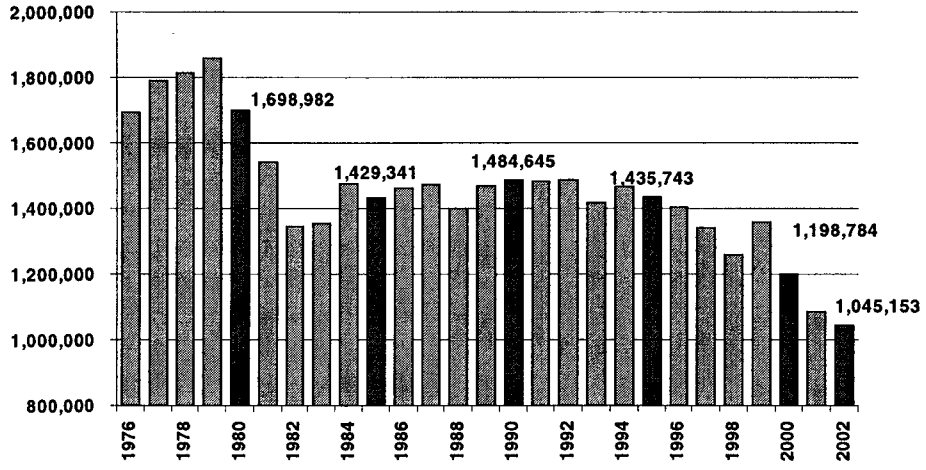
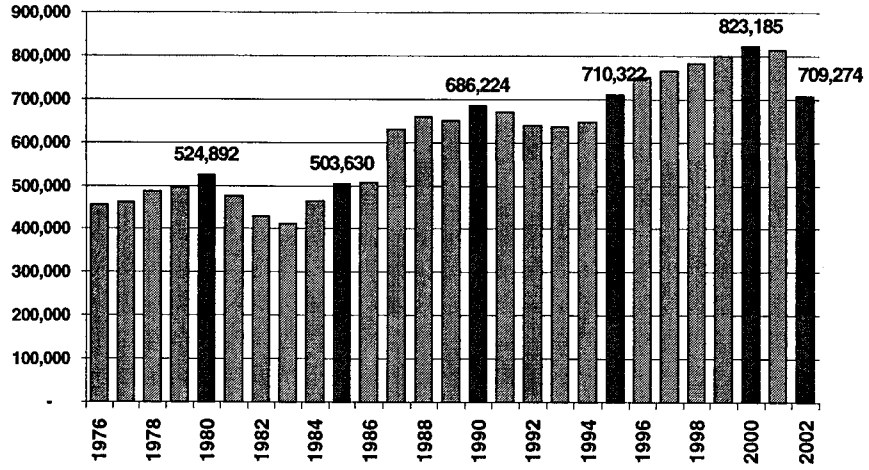


Figure 7-3: Commercial Operations at SCAG Commercial Airports



As air carrier activity at the region's commercial airports has increased, general aviation and (to a lesser extent) air taxi/commuter services have decreased at these airports, particularly in the past 10 years. Even with the growth in General Aviation following the General Aviation Revitalization Act of 1993, general aviation activity at SCAG commercial airports declined. In essence, a ripple was traveling throughout the aviation system.

In developing the forecast, SCAG examined:

- Current Airport Master Plans, if available
- 2003 FAA Terminal Area Forecast
- Historical airport trends and forecasts, both local and regional
- Airport capacities, both landside and airside
- Commercial aviation forecasts developed for the 2004 Regional Transportation Plan.

Regional Trends

By 2030, urbanized commercial airports in the region will have reached their physical or legal capacity. Urbanized general aviation airports will also have reached capacity. Indeed, some urbanized general aviation airports already have reached (surface) aircraft handling capacity, and have waiting lists for hangars for based aircraft. Runway capacity is more independent of based aircraft dependent upon the number of transient activity. Therefore airport activity can increase, even though the airport cannot support any more based aircraft.

SCAG's commercial aviation plan assumes the growth of corporate activity at both suburban air carrier and large (urban and suburban) general aviation airports. Much of this growth will be in the rapidly urbanizing portions of western Riverside and San Bernardino Counties, as well as the eastern portion of Los Angeles County. The following paragraphs examine the ripple effect on airports as airport capacity constraints spread across the region.

West Los Angeles County
West side airports act as relievers for LAX. Santa Monica airport supports smaller corporate jets, while Hawthorne and Torrance support smaller, propeller driven aircraft. Long Beach has significant general aviation activity. Each airport has business clusters located near it. Santa Monica has the entertainment industry. Hawthorne has aerospace. Torrance has aerospace and corporate headquarters, such as Honda North America. Each will have significant general aviation demand and should grow in business aviation activity through the forecast period. Compton Airport, able to support only the smallest aircraft, and located in a complex airspace environment, can support only personal recreational activity and should grow at a much reduced rate.

Orange County
There are two airports in Orange County, John Wayne and Fullerton airports. Both airports are legally and/or physically constrained. John Wayne airport, with its nearby corporate concentrations, is expected to have greater increases in corporate general aviation activity than the Fullerton Airport. As John Wayne activity increases, some general aviation activity is anticipated to transfer to Fullerton and the Chino/Ontario area.

San Fernando Valley
There are three airports in the San Fernando Valley. All three airports are located in built-out urban environments and have reached, or are approaching their physical capacity for basing aircraft. While the airports remain in the urban core, growth in general aviation has been slower than other regional areas in the past decade. Corporate aviation has increased.

West San Bernardino County/West Riverside County/East Los Angeles County

This rapidly urbanizing triangle encompasses 11 airports from El Monte in the west, Redlands Airport in the East, and March Inland Port to the south. Airports include,

The majority of the airports are conveniently located near major freeways, I-10, SR-60 and SR-91. The area also has the highest concentration of pilots within the Inland Empire. They are also the first tier of airports to be impacted by the lack of landside capacity at urbanized Los Angeles and Orange County airports. Activity and based aircraft within this area are forecast to increase at a higher rate than other airport areas in the region.

North Los Angeles County
The majority of available airport capacity is in the northern section of Los Angeles County. There are three airports in North Los Angeles County; Gen. William J. Fox Airfield, Palmdale Regional Airport and Agua Dulce Airpark

The area is served by one major freeway, SR-14 that connects the area to the San Fernando Valley. Smaller roads such as Rte. 138 and Palmdale Boulevard connect the high-desert area to Interstate 5 near Gorman and Interstate 15 near Victorville, respectively. General aviation demand in the area could remain depressed as compared to other areas for several reasons. The area remains, for the most part, a bedroom community. The lack of surface transportation access to the area as well as job concentrations in the urban core lengthens commute times, reducing the available time for local activities, such as flight training. Although the area is expected to grow in

population tremendously by 2030, that growth may not necessarily translate into greater local aviation activity.

Imperial County

The county is rural in nature with agriculture as the key industry. The primary airport, Imperial County Airport, offers commuter service. Aviation growth in the county is dependent upon various factors, including regional growth patterns in the San Diego and SCAG regions, industrial activity within Imperial County and nearby maquiladora industries.

Ventura County

There are three public use airports in Ventura County, one of which offers commuter service. The county is rapidly urbanizing, and there is little flat land available for airport development. The three airports are Oxnard, Camarillo and Santa Paula. An airfield exists at the Ventura County Naval Base (formerly called Point Mugu Naval Air Weapons Station), however, the current mission of the base precludes the establishment of a joint-use facility on the premises. Little aviation growth is anticipated in the county because of limited airport capacity.

Eastern San Bernardino and Riverside County

Airports in Eastern San Bernardino and Riverside County are predominantly found in remote locations. Activity at these airports fluctuates based on local population, nearby businesses or resort locations as well as airport characteristics.

FORECAST BY COUNTY

Imperial County

Imperial County has six airports, 179 certified pilots (in 2002) and 179 based aircraft (221 aircraft owners). Airports include:

Brawley	Holtville
Calexico	Imperial County
Hatfield (Calipatria)	Salton Sea

Brawley Airport

Brawley Airport had 20,000 aircraft operations in 2001 and approximately 72 based aircraft. This is approximately the same information provided at historical airport inventories conducted by, or for, SCAG. Activity is expected to remain stable at 20,000 operations throughout the forecast period. Based aircraft in 2001 had already met the 2020 aviation forecast completed in 1999. Updating the 1999 forecast brings the possibility of 93 aircraft in 2030.

Calexico International Airport

Calexico Airport is an international general aviation airport located near the Mexican border. As reported in the 1999 general aviation study, activity has declined as a result of the devaluation of the peso, low tourist traffic and lack of airport improvements. Activity is expected to decline slightly until 2005 and then increase to nearly 18,000 by 2030. With 21 based aircraft, the airport has exceeded the 1999 forecast. Based aircraft are expected to increase to 25 by 2030.

Cliff Hatfield

Cliff Hatfield Airport (the former Calipatria Airport), had 4,800 operations in 2001, the equivalent of its 1997 activity. Cliff Hatfield Airport's primary activity is crop dusting with approximately 95 percent of their operations devoted to agriculture. There were no based aircraft at the facility in 2001. It is anticipated that activity will remain constant throughout the forecast period.

Holtville Airport

The State of California suspended the airport's operating permit due to poor runway conditions (for which no corrective actions would be taken in a reasonable time frame) in 2002. The airport is considered closed, but could reopen if and when improvements are completed and the State renews the operating permit. SCAG is considering the airport closed for forecasting purposes only.

Imperial County

Imperial County Airport is the primary airport within the county. The airport offers commuter and air taxi services along with general aviation support. Eighty-six aircraft are based at the airport in 2002 compared to 110 in 1999. Much of the decline can be attributed to the recent economic downturn and can be assumed to be temporary. The airport, being the largest in the county, has certain economies of scale over other airports in the county. Activity is expected to stay neutral in the short-term and rise slowly to 88,750 in 2030. Based aircraft are also expected to remain constant in the

short-term, rising to 127 by 2030. Enplanements are expected to remain constant until 2005, and then return to previous levels.

Salton Sea

Salton Sea Airport, a privately owned public-use airport had 450 aircraft operations, mostly ultra-light, in 1997. There are no based aircraft. Airport ownership has recently changed and the new owners are developing a business plan for the property that may or may not include aviation. SCAG is estimating no change in operations or based aircraft during the forecast period.

Table 7-6: Forecasts – Imperial County

	2005	2010	2015	2020	2025	2030
Brawley	20,000	20,000	20,000	20,000	20,000	20,000
Calexico	10,000	11,278	12,556	15,375	16,653	17,931
Cliff Hatfield	4,800	4,800	4,800	4,800	4,800	4,800
Holtville	Closed	Closed	Closed	Closed	Closed	Closed
Imperial County*	70,000	73,750	77,750	81,250	85,000	88,750
Imperial County (enplanements)	13,789	18,564	20,400	22,300	24,500	26,900
Salton Sea	450	450	450	450	450	450
Total	**105,250**	**110,278**	**115,556**	**121,875**	**126,903**	**131,931**

Sources: FAA Terminal Area Forecast/SCAG
**General Aviation Operations only*

Los Angeles County

Los Angeles County airports are

Agua Dulce	LAX
Brackett	Long Beach
Burbank-Glendale-Pasadena	Palmdale
Catalina	Santa Monica
Compton-Woodley	Torrance/Zamperini
El Monte	Van Nuys
Gen. William Fox Airfield	Whiteman
Hawthorne	

Airports in urbanized Los Angeles County are constrained in that they are in built-out urban environments and are approaching their physical capacity for basing aircraft. There are already physical and legal mechanisms in place to limit growth at some general aviation airports. Much of the aviation activity growth in Los Angeles County will be one the eastern edge, as well as West Side/Southbay airports near established business concentrations.

Growth in general aviation has been slower than other regional areas in the past decade, although corporate aviation, particularly corporate jet activity has increased There are significant business concentrations near urbanized airports in west Los Angeles County and in the San Fernando Valley, indicating that corporate activity should grow at a higher rate than private/recreational activity.

Agua Dulce Airpark
Agua Dulce Airpark is a privately owned, public-use airport. The airport estimates 3,500 operations in 2001 and 27 based aircraft. The airport reports no itinerant activity. The FAA forecasts no changes in activity in their Terminal Area Forecast. Based Aircraft should also remain constant.

Brackett Field
Brackett Field, in the City of La Verne, is midway between El Monte Airport and Ontario International Airport. The airport has two parallel runways, one 3,600 feet and the other 4,800 feet. The airport lists 2001 activity at 270,000 operations. The airport indicates that 4,500 of these operations were from jet aircraft.

The FAA has forecast that local activity will predominate and grow at a faster rate than itinerant operations. Extrapolating the FAA terminal area forecast to 2030 reveals 436,000 aircraft operations. SCAG forecasts 600 based aircraft by 2030.

Burbank-Glendale-Pasadena Airport
This commercial airport hosts significant general aviation activity. In 2001, the FAA reported 74,000 general aviation operations at the airport (from 160,000 total aircraft operations). Eighty Four percent of activity is itinerant, while 16 percent is local.

The FAA forecast for this airport indicates the percentage will remain fairly stable, with itinerant activity increasing at a slightly faster rate. However, SCAG's (commercial) regional aviation plan forecasts a higher number of commercial activity at the airport in 2030 than what the FAA is forecasting. This will impact general aviation as market forces drive out slower propeller driven aircraft. Private or corporate jet aircraft that are more compatible with commercial activity should be largely unaffected. SCAG forecasts that general aviation activity will increase only slightly by 2030, to just under 79,000 operations. Based aircraft should continue its decline, primarily shedding smaller, propeller driven aircraft, while private and corporate jet aircraft should remain stable. In 2030, based aircraft could reach 100 aircraft.

Catalina Airport
The Catalina Airport is a privately-owned, public-use airport owned by the Santa Catalina Island Conservancy. There were 18,400 aircraft operations in 2001 and eight based aircraft. In 2002, the airport increased to 23,000 operations and 10 based aircraft. The airport has no hangars and 25 tie-downs. The primary market is island tourism, which is also served by boat. It is anticipated there will be no change in aircraft activity or based aircraft throughout the forecast period.

Compton Woodley Airport
The Compton-Woodley Airport has an Airport Reference Code designation of A1, indicating the airport can only handle small, personal aircraft. The airport is located in a built out urban environment with nearly 90% of the surrounding area zoned for residential use. In addition, the surrounding airspace is very complex with commercial aircraft from both LAX and Long Beach operating nearby. Activity has been declining at the airport since the early 1990s. The airport had roughly 60,000 aircraft operations in 2002.

The FAA Terminal Area Forecast indicates no growth at the airport. However, with other west-side airports physically or legally constrained, there could be a small increase in

activity as the other airports reach their capacity limits. It is anticipated that activity will remain static until other airports start to meet their physical or legal constraints, forcing activity outward. Beginning around 2020, activity will begin to increase, reaching 65,000 operations in 2030. Based aircraft should remain constant with approximately 230 propeller driven aircraft at the airfield.

El Monte Airport

El Monte Airport is located in Los Angeles County but is within Ontario Airport's sphere of influence as well as Los Angeles and Orange Counties demand areas. The airport had 171,000 operations in 2001. Operations are expected to decline slightly until 2005. After that the airport is forecast to have an average annual growth rate of 1.48% until 2030 where it should reach 225,000 operations. Based aircraft should remain fairly constant with 360 aircraft at the facility in 2030.

General William J. Fox Airfield

Fox Airfield is home to 198 based aircraft, including a U.S. Forest Service Tanker Base. There were 77,000 aircraft operations in 2001. It is the only unrestricted public-use airport in the Palmdale/Lancaster area. Extrapolating the FAA Terminal Area Forecast to 2030, it is anticipated that activity will increase to 106,507 operations by 2030. Based aircraft should increase to 277 by 2030 using the same methodology.

Hawthorne Municipal Airport/Jack Northrop Field

Hawthorne Airport, located just five miles east of LAX, is also constrained by surrounding development. The airport is only 600 feet wide. Interstate 105 runs parallel to Runway 7/25 and constrains development to the north. Industrial activity (Northrop-Grumman) constrains the airport to the south. Runway Seven (4,956 ft) is displaced by 971 feet, effectively limiting the runway to less than 4,000 feet. Runway 25 is displaced by 463 feet, limiting that runway to roughly 4,500 feet. The long-term development potential for this airport is limited. However, it will possibly be (along with Compton) one of the few airports in West Los Angeles County that primarily serve propeller driven aircraft. Although the airport operates in a complex airspace environment, its location close to nearby industry clusters, notably aerospace is convenient to "air commuters" who fly to work, rather than drive, as well as some corporate activity.

Utilizing the FAA Terminal Area Forecast, Hawthorne operations should stay consistent, with slight annual increases in activity (0.19% annual growth for itinerant operations and 0.14% annual growth for local activity) through 2030. Total aircraft operations are forecast to increase from 79,870 in 2001 to 83,775 in 2030. Based aircraft should remain constant with approximately 170 based aircraft in 2030.

Long Beach Airport/Daugherty Field

Long Beach airport has increased commercial activity tremendously with the addition of "Jet Blue Airways." There were approximately 478,000 aircraft operations in 2001. The airport has legal noise restrictions in place that permit a minimum 41 commercial flights per day and 25 commuter flights. The restrictions are "noise-driven" in that the airport's 1990 noise footprint can not be exceeded. There are also significant restrictions on general aviation.

Through the use of quieter aircraft and noise abatement procedures, the airport could add additional commercial or commuter flights to equal the 1990 noise footprint. However, if this footprint is exceeded, the airport is required to take away as many

commercial or commuter flights as necessary (to the minimum 41/25) to remain within the noise budget.

Because of this uncertainty, it is difficult to forecast, with any great level of confidence, general aviation activity through 2030. The airport is already at the same level of general aviation activity it had in 1991. It is anticipated that total operations will level off around 525,000 in 2020 and remain static after that time. Almost the entire growth will be from general aviation, because of the strict limits on commercial and commuter flights.

Based aircraft fluctuate with business activity and Fixed Base Operators, both of which are highly sensitive to economic impacts. Based aircraft should increase slightly to 575 aircraft by 2030.

Los Angeles International Airport
The region's primary international hub airport, LAX, has corporate jets (and several private jets) accounting for the 15,000 estimated annual general aviation operations (approximately two percent of all airport activity). General Aviation activity at the airport should remain corporate in nature and fluctuate around 15,000 aircraft operations annually. Only four based aircraft remain at the airport and that number is not expected to change during the forecast period. There were roughly 177,000 air taxi operations in 2002 at the airport, which could be impacted depending on market reaction to the proposed LAX Master Plan.

Palmdale Regional Airport
Palmdale Regional Airport, owned by Los Angeles World Airports is a joint-use facility with Air Force Base Plant 42. As such, general aviation activity is prohibited at the airport. No general aviation activity is forecast at Palmdale Regional Airport.

Santa Monica Airport
Santa Monica Airport handled approximately 133,000 aircraft operations in 2001. Itinerant activity was double local activity. Santa Monica has extensive restrictions on aircraft in order to reduce noise, prohibiting Stage 2 aircraft with or without hush-kits and limiting the airport to aircraft that emit less than 95 dB SENEL. Other prohibitions include restrictions on flight training, engine maintenance and aircraft over 60,000 lbs.

While these restrictions have an impact on corporate jet activity, they have not eliminated it. Twenty-five jet aircraft were based at the airport in 2001 (of a total of 405 based aircraft). However, there were over 13,000 jet operations that year, about 10% of all activity at the airport.

Airport activity is expected to increase by 30% between 2001 and 2030, with 173,600 aircraft operations in 2030.

Based aircraft will decline in the short term, primarily from the closure of the air museum, but rise quickly reaching 550 by 2015 and remaining at that level through the rest of the forecast period.

Torrance Municipal/Zamperini Field
Zamperini Field had 210,000 aircraft operations in 2001. Approximately 50% of the activity is itinerant. The airport has 15 jet aircraft based at the facility, even though jet fuel is not provided. The airport sits near the North American headquarters of several

Japanese auto firms as well as other industrial sites. Robinson Helicopter has their manufacturing facility at the airport. Activity will likely shrink slightly between now and 2005 to 188,000 aircraft operations. However, between 2006 and 2030, activity is forecast to increase by 48%, with approximately 284,000 aircraft operations in 2030.

Torrance, like other urban general aviation airports, has reported an increase in based aircraft between 1997 and 2001. This is expected to continue with the airport reaching 600 based aircraft by 2030.

Van Nuys Airport

Van Nuys Airport is the busiest general aviation airport in the United States, and possibly the world, with 443,000 aircraft operations in 2001. Activity increased by 12.9% in 2002 to 500,000 operations. Over 732 aircraft were based at the facility that year. The airport reports over 16,000 air taxi operations in 2002, about twice the number from 2001. The airports estimated Annual Service Volume (ASV) indicates the airport reaches capacity at 355,000 operations, depending upon fleet mix and other factors. The airport has annually exceeded that level of activity since before 1976 (beginning of data collection period).

Because of the urban environment, there is market pressure for the airport to cater to larger turbine aircraft at the expense of smaller propeller driven aircraft. Anecdotal reports indicate some of these smaller aircraft and related FBOs are starting to leave the airport. The airport is taking steps to reverse this trend by dedicating parts of the airport to quieter propeller driven aircraft.

Nearly all the forecast growth is itinerant general aviation and air taxi activity. It is anticipated that based propeller driven aircraft will remain stable, but will have little to no growth. The FAA Terminal Area Forecast (extrapolated to 2030) indicates the airport could easily exceed 800,000 operations by 2030. However, it is unlikely the airport can handle that level of activity. Using professional judgment, it is anticipated that airport activity will sharply rebound to 560,000 operations by 2005 and level off because of the physical capacity of the airport. The airport should reach 587,000 operations by 2030. Airport infrastructure development could impact this forecast, bringing activity up to the low 600,000s. Based aircraft should remain constant with approximately 770 based aircraft by 2030.

Whiteman Airport

Whiteman Airport is located north of the Burbank Airport. It has a single runway and is designed primarily for smaller general aviation aircraft. Activity in 2001 was 112,000 operations and there were 563 based aircraft. With the growth at both Burbank and Van Nuys airports, it is expected that Whiteman will benefit to some extent from those airports as they approach capacity. Growth will be slower because of the economic slowdown's impacts on general aviation. The airport is anticipated to reach 163,000 operations by 2030, which is about 71% of the Annual Service Volume (ASV). According to the FAA, based aircraft could reach a high of 763 by 2020. The airport Master Plan calls for 850 based aircraft. By 2005, Whiteman will add up to 60 new hangars and 50 new tie downs.

Table 7-7: Forecast – Los Angeles County

	2005	2010	2015	2020	2025	2030
Agua Dulce	3,500	3,500	3,500	3,500	3,500	3,500
Brackett	269,561	303,315	337,070	370,825	404,189	436,027
Burbank-Glendale-Pasadena*	75,221	75,912	76,604	77,297	78,001	78,711
Catalina	23,000	23,000	23,000	23,000	23,000	23,000
Compton-Woodley	60,000	62,000	63,000	68,000	70,000	75,000
El Monte	160,358	173,976	187,594	201.212	215.378	225,000
Gen. Wlm. Fox Airfield	83,277	87,896	92,565	97,235	101,892	106,507
Hawthorne	80,397	81,062	81,731	82,407	83,088	83,775
Long Beach*	388,469	431,881	477,352	524,711	525,000	525,000
Los Angeles Int'l*	15,000	15,000	15,000	15,000	15,000	15,000
Palmdale*	0	0	0	0	0	0
Santa Monica	108,065	121,291	133,980	146,653	159,957	173,631
Torrance/Zamperini	188,303	207,433	226,586	245,713	264,964	284,318
Van Nuys	559,306	570,011	578,018	580,913	583,824	586,749
Whiteman	115,542	125,280	135,018	144,758	153,654	163,098
Total	**2,119,999**	**2,271,557**	**2,421,018**	**2,370,213**	**2,456,284**	**2,769,316**

**General Aviation Operations only*
Sources: FAA Terminal Area Forecast/SCAG

Orange County

There are two airports in Orange County, John Wayne and Fullerton airports. Both airports are legally or physically constrained.

John Wayne Airport

John Wayne Airport is a commercial airport with a thriving corporate and general aviation base. Forty-two turbine aircraft are based at the airport, as well as over 500 propeller driven aircraft. Corporations located in nearby Newport Beach, Costa Mesa and Irvine depend on the airport for private, corporate and commercial needs. A component of the general aviation activity at John Wayne is business in nature. There were approximately 284,000 general aviation operations in 2001.

The existing Settlement Agreement Amendment for John Wayne airport limits commercial activity to 10.8 million annual passengers. It is anticipated that general aviation would grow at the airport at just over one percent annually throughout the forecast period, with itinerant activity increasing faster than local general aviation. A greater proportion of the GA operations will likely be private turbine aircraft operations.

Because of the small physical size of the airfield, it is now necessary to close the GA runway in the early morning so that it can be used as a taxiway for the commercial aircraft. This is likely to continue during the forecast period. Under this forecast, General Aviation activity should increase from 275,000 in 2002 to 315,000 by 2030 (John Wayne Airport forecasts 293,000 general aviation operations by 2015).

Fullerton Municipal Airport

Fullerton Airport is at capacity from a facility standpoint. All hangars are 100% occupied, and tie-downs are 50% occupied. The airport is also in a built-out urban environment. Activity in 2001 was approximately 101,000 aircraft operations.

As John Wayne Airport grows as a result of the settlement agreement amendment, there may be pressure on Fullerton to accept general aviation aircraft vacating John Wayne. Operational activity could increase substantially, primarily from transient aircraft.

As suggested by SCAG's Commercial Aviation Forecast, activity at Fullerton is forecast to increase six percent between 2001 and 2030.

Table 7-8: Forecasts – Orange County

	2005	2010	2015	2020	2025	2030
Fullerton	101,850	102,709	103,569	104,429	105,300	106,300
John Wayne*	238,238	253,480	268,686	283,877	299,156	314,665
Total	**340,088**	**356,189**	**372,255**	**388,306**	**404,456**	**420,965**

**General Aviation Operations only*
Sources: FAA Terminal Area Forecast/SCAG

Riverside County

Airports in Riverside County are predominantly found in remote locations. Activity at these airports fluctuates based on local population, nearby businesses or resort locations as well as airport characteristics. Airports in this area include:

Banning	Desert Center	March Inland Port
Bermuda Dunes	Desert Resorts	Palm Springs
Blythe	Flabob	Perris Valley
Chiriaco Summit	French Valley	Riverside Muni
Corona	Hemet Ryan	

Banning Municipal Airport

Banning Municipal Airport had 10,500 aircraft operations in 2001 and 75 based aircraft, the same as from the 1997 survey completed for the 1999 general aviation forecast. The FAA forecasts no change in activity or based aircraft in the forecast period. The previous SCAG forecast indicated a decline to 9,968 by 2020. SCAG is maintaining its earlier forecast. Based aircraft should also remain constant.

Bermuda Dunes

Bermuda Dunes Airport, located outside of Palm Springs is active most of the year, with the exception of summer months when surface and air temperatures regularly exceed 110 degrees Fahrenheit. In 2003 the airport reported 42,000 aircraft operations, including 8,000 air taxi operations. Riverside County anticipates the airport to reach 72,000-75,000 operations by 2030. The FAA forecasts no change in airport activity. With airport improvements made in the 1990s, the airport should be able to maintain its existing activity with some minor growth in the outer years of the forecast reaching 45,000 (its 1997 activity level) by 2030. Based aircraft should remain stable at 117 aircraft.

Blythe

Blythe Airport reports approximately 25,000 aircraft operations in 2002, consistent with 1997 activity. Based aircraft have declined from a high of 52 in 1980 to 17 based aircraft in 1997 through 2002. SCAG forecasts no change in activity or based aircraft.

Chiriaco Summit
Chiriaco Summit activity increased from 1,800 operations in 1997 to 2,800 operations in 2002. There is one based aircraft. Riverside County forecasts the airport to reach 5,000 operations in 2022. However, the airport offers no services (fuel, tie-downs, etc). Although a nearby museum may result in some activity, it is forecast that airport activity grow only slightly, to 3,200 operations in 2030. Based aircraft should remain at its present number.

Corona
Corona is referenced as a B1 airport, indicating it's designed primarily for small piston aircraft. Its one runway is 3,200 feet long, too short for business jets.

In SCAG's 1999 general aviation forecast, it was noted that Corona Airport's aircraft operations declined by 58% between the years 1984 and 1993, from 237,000 in 1984 to 100,000 operations in 1993 and another 40% decline between 1993 and 1997 to 60,000 annual operations. In 2001, the airport had 58,000 operations.

SCAG anticipates Corona Airport activity to continue declining until 2005, with stabilization afterward. Operational activity will rise only slightly, reaching 75,000 by 2030 as other nearby airports reach capacity. Based aircraft should remain stable at 380 aircraft. Due to environmental and other constraints, expanding Corona Airport is not feasible.

Desert Center
Desert Center has no based aircraft and limited activity. The airport reports less than 2,000 aircraft operations in 2002. No services are offered at the airfield. SCAG maintains its 1999 forecast that the airport will maintain activity around 520 annual operations through the forecast period. According to officials (in the 1999 study) if Desert Center Airport closes, operations would probably go to Chiriaco Summit.

Desert Resorts
Desert Resorts Regional Airport (formerly Thermal Airport) reported 65,000 aircraft operations in 2002 and 71 based aircraft. Although this is a decline since 1997, it is expected that activity will rise to its previous levels. SCAG forecasts activity to increase along the same rates described in the 1999 general aviation forecast, from the new (2002) baseline. Activity should reach 96,634 by 2030 with 149 based aircraft.

FlaBob
FlaBob airport is a privately owned public-use airport. The airport is 81 acres and supports 73 based aircraft. Because of the limited length of the runway (3,200 ft), the airport primarily supports small recreational aircraft. The FAA does not have this airport in its terminal area forecast. Activity has declined at this airport and it is expected that the airport (26,000 operations in 2001) shall remain relatively flat throughout the forecast period, perhaps reaching 30,000 operations by 2030. SCAG forecasts no growth in based aircraft.

French Valley
French Valley Airport had 90,000 operations in 2002 and 235 based aircraft. Operations at the airport have increased from its 1997 level (79,000). Based aircraft have increased from 155 aircraft in 1997 to 275 based aircraft in 2003. Activity is forecast to increase at a 1.3% average annual rate, to 129,000 operations in 2030. Based aircraft should level

off as the airport reaches its existing hangar capacity. Any infrastructure development could lead to additional based aircraft.

Hemet-Ryan
Hemet-Ryan Airport experienced an increase of 20,000 operations between the years 1984 and 1993. Activity increased in 1997 totaling 100,000. In 1998 the United States Forest Service departed the Airport causing a drop in operations. In 2002, the airport had 70,000 operations. The airport reports 192-252 based aircraft (between 60 and 120 are gliders). SCAG forecasts Hemet-Ryan activity to remain flat through out the forecast period. The Airport Draft Master Plan forecasts 100,000 operations and 335 based aircraft in 2020.

March Inland Port
March Inland Port is a joint-use facility between the March Joint Powers Authority and March Air Reserve Base. General aviation activity is prohibited at the airport, and no general aviation operations are forecast.

Palm Springs
Palm Springs International Airport is a commercial facility with significant general aviation activity. The airport had 52,822 general aviation operations in 1997 (89,400 when commercial and air taxi operations are included). In 2001, the airport had 59,000 general aviation operations and 127 based aircraft (source FAA). As the primary airport in the area, economies of scale should translate into greater aviation demand, in terms of both commercial and general aviation. The 1999 forecast is considered to remain accurate, allowing 73,000 general aviation operations in 2030 and 173 based aircraft.

Perris Valley
Perris Valley is a privately owned, public-use airport. The facility's primary markets are recreational ultra-light aircraft and skydiving. The asphalt runway is in poor condition. There were 25,000 operations in 2001. There is no historical data on operations or based aircraft prior to 2001. Ultra-light and skydiving activity is forecast to increase to 35,000 operations by 2030. Based aircraft could decrease because of the poor runway condition.

Riverside Municipal
Riverside Municipal Airport is forecast to almost double its activity by 2030. The airport is one of the few regional airports that gained in activity in the period between 1999 and 2002 reaching 94,000 operations in 2001 (source FAA). Much of the increase in demand is from business jets. Extrapolating the FAA forecast to 2030, the airport is forecast to reach nearly 185,000 operations in that year.

The airport supports both propeller driven and turbine aircraft. The airport has the ability to expand within its existing boundaries to support additional based aircraft. Demand for hangar space at the airport is also expected to increase (231 based aircraft in 2001) to 423 based aircraft in 2020 (source FAA). If the trend continues, there will be a demand for 523 based aircraft in 2030.

Table 7- 9: Forecasts – Riverside County

	2005	2010	2015	2020	2025	2030
Banning	10,380	10,230	10,080	9,968	9,856	9,744
Bermuda Dunes	41,000	41,000	42,000	43,000	44,000	45,000
Blythe	25,000	25,000	25,000	25,000	25,000	25,000
Chiriaco Summit	2,842	2,914	2,988	3,063	3,140	3,220
Corona	58,000	59,000	63,000	67,000	71,000	75,000
Desert Center	520	520	520	520	520	520
Desert Resorts	65,000	66,467	74,009	81,551	89,092	96,634
FlaBob	26,000	26,000	27,000	27,000	28,000	30,000
French Valley	93,556	99,797	106,455	113,557	121,132	129,313
Hemet Ryan	70,000	70,000	70,000	70,000	70,000	70,000
March Inland Port*	0	0	0	0	0	0
Palm Springs*	70,015	70,633	71,251	71,870	72,498	73,132
Perris Valley	25,000	25,000	27,500	30,000	32,500	35,000
Riverside Muni	113,213	127,688	142,164	156,640	170,918	184,763
Total	**600,526**	**624,249**	**661,967**	**699,169**	**737,656**	**777,326**

General Aviation Operations only
Sources: FAA Terminal Area Forecast/SCAG

SAN BERNARDINO COUNTY

Airports include,

Apple Valley	Needles
Baker	Ontario Int'l
Barstow-Daggett	Redlands
Big Bear City	Rialto
Cable	San Bernardino Intl
Chemehuevi	Southern California Logistics
Chino[1]	Twenty-Nine Palms
Hesperia	Yucca Valley
Hi-Desert	

Apple Valley

Between 1984 and 1993, Apple Valley Airport experienced a decrease in operations of 37 percent. The decline continued between 1993 and 1997 with an additional 20% loss. The airport reported 47,500 operations in 2002, a 28% increase from what the FAA indicated for 2001. Nearly 170 based aircraft are based at the facility, which is also an increase. The recent construction of a crosswind runway may have played a part in the increase. SCAG is forecasting minor growth at the airport, slowly increasing with local population increases. Based aircraft should remain constant.

Baker

Baker airport had 660 operations in 2001 and zero based aircraft. This represents an almost doubling of activity from 1997. Ten percent were ultra-light aircraft. Activity and based aircraft are expected to remain constant throughout the forecast period. However, changes in regional population growth could impact the airport, as well as the potential

effects of the new sport aircraft (ultra-light) category being developed by the FAA could impact airport activity.

Barstow-Daggett
Barstow-Daggett Airport is a public-owned, public-use airport. Military operations contribute between 15,000-20,000 (annual) operations towards the airport's 41,600 operational activity in 2001. Assuming military activity remains constant at 18,000 annual operations, total activity could reach 67,500 and 102 based aircraft in 2030 using the same growth rates as the 1999 general aviation forecast.

Big Bear City
Big Bear City Airport has maintained an average of roughly 31,000 annual operations. However, based aircraft have nearly doubled, with 236 reported in 2002. New hangars have been constructed. There has been significant residential growth near the airport. However, despite the increase in based aircraft, the lack of corresponding activity indicates little growth. Activity should remain stable at roughly 31,000 operations. Based aircraft should also remain constant unless the airport infrastructure is enhanced.

Cable
Cable airport is a privately-owned, public-use airport relieving Ontario International Airport. There is an industrial area to south, a park to the north but residential to east and west. The airport is completing construction of an airport business park to the southwest of the facility that would include hangars as well as office space. The airport has rented 100% of its smaller hangars, and is expected to fully rent the hangars under construction once complete. The FAA forecasts aircraft operations to remain near 80,000 operations. However, the airport has already exceeded 97,000 operations in 2002. Growth at Ontario International will impact activity at Cable Airport. SCAG has forecast commercial activity at Ontario to increase five-fold. With that increase, there will be market and operational pressure for propeller powered aircraft to not operate at Ontario. Cable's one runway is too short for most business jets, but adequate for many piston aircraft. Activity at Cable Airport is forecast to increase to 140,000 by 2030. Based aircraft are expected to increase to 380 aircraft.

Chemehuevi Valley
Chemehuevi Valley Airport is a public-owned public use airport near Havasu. Activity was 100 flight operations in 2001 and zero based aircraft. Activity and based aircraft are forecast to remain constant throughout the forecast period.

Chino
Chino Airport is strategically located to relieve Ontario, Los Angeles and Orange County airports. Aircraft based at Chino come from as far west as Manhattan Beach in Los Angeles County and as far south as San Clemente and Dana Point in Orange County, indicating their already exists a lack of general aviation capacity in the urbanized areas. Its ability to handle large commercial aircraft makes it not only a general aviation reliever, but a business jet reliever as well. Itinerant operations are expected to grow from 58% of total operations to 65% of total operations by 2025. Activity should increase from 145,000 operations in 2001 to 222,000 operations in 2030 based on the current master plan. Based aircraft under the Master Plan are also forecast to increase to over 1,400 aircraft by 2025.

Hesperia
Hesperia Airport had 5,000 aircraft operations in 2002 and approximately 43 based aircraft, a significant drop from the 17,000 operations in 1993. The privately-owned public-use airport near Victorville boasts a hotel, restaurant and swimming pool and is actively marketing their airport. Activity and based aircraft are forecast to remain flat throughout the forecast period.

Hi-Desert
Hi-Desert Airport reported approximately 4,200 operations in 2002 and 14 based aircraft, a significant drop since the early 1990s. The airports two runways support light general aviation aircraft. Airport activity growth is dependent upon regional growth patterns. The airport is forecast to increase in activity by 800 annual operations between 2003 and 2030. Based aircraft are expected to drop to 10 based aircraft.

Needles
Needles Airport activity has declined over the past four survey periods (1984, 1993, 1997 and 2001). Activity is forecast to slightly decline between now and 2030 to roughly 9,830 annual operations. Based aircraft are expected to remain constant at approximately 15 aircraft.

Ontario International Airport
Ontario International Airport is a commercial airport and is the primary airport in this area. SCAG has forecast a significant increase in commercial activity, going up from seven million passengers in 2000 to 30 million passengers by 2030, with the accompanying increase in commercial operations. There were 32,000 general aviation operations in 2002, a drop of 2,000 operations from the prior year.

The preliminary forecast for the Ontario Master Plan suggests that in 2030, the airport can still support approximately 52,000 general aviation operations, with the associated commercial activity. This general aviation activity will be primarily jet aircraft, as slower and lighter piston powered aircraft will seek other airport environs. Much of this gain is based on the physical constraints at urban airports in Los Angles and Orange counties in terms of based aircraft and general aviation operations. (Source: HNTB).

SCAG's forecast is similar, in that itinerant general aviation traffic will average two percent annual growth after 2005 and local general aviation traffic will grow by roughly 1.22% annually (also after 2005). This reaches a total general aviation activity forecast of just under 51,000 operations in 2030.

Redlands Municipal
Redlands Municipal Airport is a general aviation airport supporting nearly 46,000 flights in 2002. This is a marked increase since 1997. Security improvements may be the primary cause for the increase in activity, as well as the affluence of the nearby community. However, based aircraft have declined since 1993, from 230 aircraft then, to 206 currently. Airport growth should mirror business and residential development in the area, as well as urban airports reaching their capacity constraints. Activity is forecast to increase by 0.2% until 2010, and at 0.5% afterwards. Based aircraft should remain around 200 aircraft.

Rialto

The general plan for Rialto has the area surrounding the airport zoned for industrial and business uses. Much of the industrial/corporate base has followed the I-10 freeway, however. Classes of businesses most likely to use aviation extensively are not located near the airport. The extension of I-210 provides easier access to the airport and may allow the airport to provide greater relief to urbanized airports, especially once Ontario and Los Angeles and Orange County airports approach capacity limits.

As capacity is approached at urban LA metropolitan airports, rates have increased, resulting in smaller aircraft leaving the urban core. Recent news articles suggest that there is an increase in based aircraft at Rialto for this reason. Rialto should appeal to most propeller-driven aircraft owners given its runway length and proximity to residential areas. The FAA forecast that operations would remain constant (no growth) from its current activity (156,000 operations in 2001). However, this did not take into account infrastructure improvements such as the I-210 extension, or the constraints at urbanized airports. Operations could conceivably go as high as 200,000 by 2030, although based aircraft should remain constant or increase only slightly.

The airport is being evaluated by the City. Possible recommendations include both aviation and non-aviation uses for the facility.

San Bernardino International

San Bernardino International Airport increased operations from 13,500 general aviation operations in 1997 to 59,040 in 2001, a four-fold increase. There is no long-term trend to base forecasts, so projections are qualitative in nature.

Because the airport currently has low commercial type jet activity, a long runway and substantial aircraft parking/storage areas, general aviation activity should increase quickly at this airport in the short term as pilots move their aircraft from expensive and constrained airports in the urban core. With the largely developed infrastructure, the airport could be a magnet for aviation services, which also serve as a magnet for basing aircraft. However, some of this growth could come at the expense of nearby smaller airports as owners look to the greater efficiencies at a larger airport. General aviation growth should slow down once regular commercial/cargo activity commences, sometime around 2005. Forecasts are for general aviation activity to double to 98,000 operations. Based aircraft should also double, to 100 aircraft, although it could exceed that number.

Southern California Logistics

Southern California Logistics reported 21,500 aircraft operations in 2002. The airport is focusing on inter-modal cargo and commercial aircraft restoration/rehabilitation. Runway extensions to 15,050' will give the airport the title of the longest concrete runway in the United States and allow cargo flights during the hot summer months.

While the available infrastructure may serve as a magnet for general aviation pilots and businesses, the number of large commercial and cargo aircraft on the airfield will discourage some potential tenants in favor of nearby airports. Activity is forecast to increase to 37,000 operations by 2030, which, while significant, may be the general aviation plateau for the airport. Based aircraft will fluctuate based on the number of commercial aircraft moving in and out of the facility for storage/maintenance.

Twenty-Nine Palms

Twenty-Nine Palms Airport is a public owned, public-use airport. In 2002, the airport had 21,000 aircraft operations, an increase of 3,000 from the prior year. Seventeen aircraft were based at the airport, including four gliders.

Facility upgrades in the 1990s and increased flight activity spurred airport activity according to the 1999 General Aviation Study. The County installed a new runway and rehabilitated the other runway and. A self-fuel island was recently installed and landside upgrades are being planned.

The FAA Terminal Area Forecast projected no growth throughout the forecast period. The 1999 General Aviation Study forecast a minimal growth rate. However, this was prior to the improvements. SCAG is forecasting an annual growth rate of 0.2% through 2005 and 0.7% annual growth thereafter. Based aircraft should remain constant at 17 aircraft.

Yucca Valley

Yucca Valley Airport is a privately-owned public-use airport with a residential airpark adjacent to the facility. The airport is leased to the Yucca Valley Airport District. The airport had 12,500 operations and 55 based aircraft in 2001. Activity and based aircraft are expected to remain constant throughout the forecast period.

Table 7-10: Forecasts – San Bernardino County

	2005	2010	2015	2020	2025	2030
Apple Valley	47,500	47,690	48,169	48,653	49,881	51,141
Baker	660	660	660	660	660	660
Barstow[1]	44,373	48,996	53,618	58,240	62,862	67,500
Big Bear City	31,500	31,500	31,500	31,500	31,500	31,500
Cable	101,607	109,286	116,964	124,643	132,231	140,000
Chino[1]	153,000	165,000	178,500	192,295	206,300	222,244
Hesperia	5,000	5,000	5,000	5,000	5,000	5,000
Hi Desert	4,300	4,400	4,550	4,700	4,850	5,000
Needles	10,409	10,295	10,180	10,066	9,952	9,838
Ontario Int'l	32,379	35,413	38,742	42,395	46,404	50,806
Redlands	46,168	46,771	47,952	49,162	50,404	51,677
Rialto	156,000	164,800	173,600	182,400	191,200	200,000
San Bernardino Intl	76,952	81,122	85,292	89,462	93,632	97,802
SoCal Logistics	23,184	25,991	28,798	31,605	34,412	37,219
Twenty Nine Palms	21,327	22,084	22,868	23,680	24,520	25,391
Yucca Valley	12,500	12,500	12,500	12,500	12,500	12,500
Total	**766,859**	**811,508**	**858,893**	**906,961**	**956,308**	**1,008,278**

General Aviation Operations only
[1] Source: Chino Airport Master Plan (2001)
Sources: FAA Terminal Area Forecast/SCAG

Ventura County

There are three airports in Ventura County:

Camarillo
Oxnard
Santa Paula

Camarillo Airport

According to the FAA Terminal Area Forecast, Camarillo based 576 aircraft in 2002 and handled 197,000 operations, up 11% from the year before (the airport reports 490 based aircraft). The airport has indicated that development potential is poor. The area around the airport is rapidly urbanizing. The airport is very close to reaching its groundside capacity, with all hangars 100% occupied and 75% of the tie-downs. Nevertheless, general aviation demand will increase because of the lack of alternative facilities within the county. Itinerant activity is expected to increase at a faster rate than local activity, with corporate jets perhaps playing a greater role at the airport. The FAA Terminal area forecast, extrapolated to 2030 indicates 207,000 operations. Based aircraft could increase up to 661 aircraft by 2020, but will probably level off between 650 and 660 aircraft unless the airport develops more aircraft storage facilities.

Oxnard Airport

Oxnard Airport is the primary airport for Ventura County. There are on average 10 commuter flights per day. There were approximately 73,000 general aviation (excluding air taxi and commuter) aircraft operations in 2002. Approximately 70% of those operations were itinerant. There were 148 aircraft based at the airport that year. Extrapolating the based aircraft forecast from the Master Plan, it is estimated there will be 176 based aircraft in 2030, at least six being jet aircraft (from zero today) and 96,000 general aviation operations.

Santa Paula Airport

Santa Paula Airport is a privately owned public-use airport. Its 2,550 foot runway is designed for small personal aircraft and cannot handle larger turboprop or corporate jet aircraft. The airport had 97,000 aircraft operations in 2002, about two thirds of which were local operations. The airport indicates that all hangars are full and 90% of tie-downs occupied. The airport reports 258 based aircraft. The airport has no development plans. The FAA forecasts no growth at the airport either in operations or based aircraft. As Camarillo and Oxnard become more crowded, there may be a slight upswing in activity during the latter part of the forecast period.

Table 7-11: Forecasts – Ventura County

	2005	2010	2015	2020	2025	2030
Camarillo	198,957	200,592	202,229	203,866	205,514	207,175
Oxnard*	75,543	79,800	83,900	92,961	92,700	95,762
Oxnard (enplanements)[1]	30,000	38,000	45,000	52,000	60,000	68,000
Santa Paula	97,000	97,000	97,000	100,000	100,000	100,000
Total	**371,500**	**377,392**	**383,129**	**396,827**	**398,214**	**402,937**

**General Aviation Operations only*
Sources: FAA Terminal Area Forecast/SCAG
[1] *Oxnard Airport Master Plan (Phase One)*